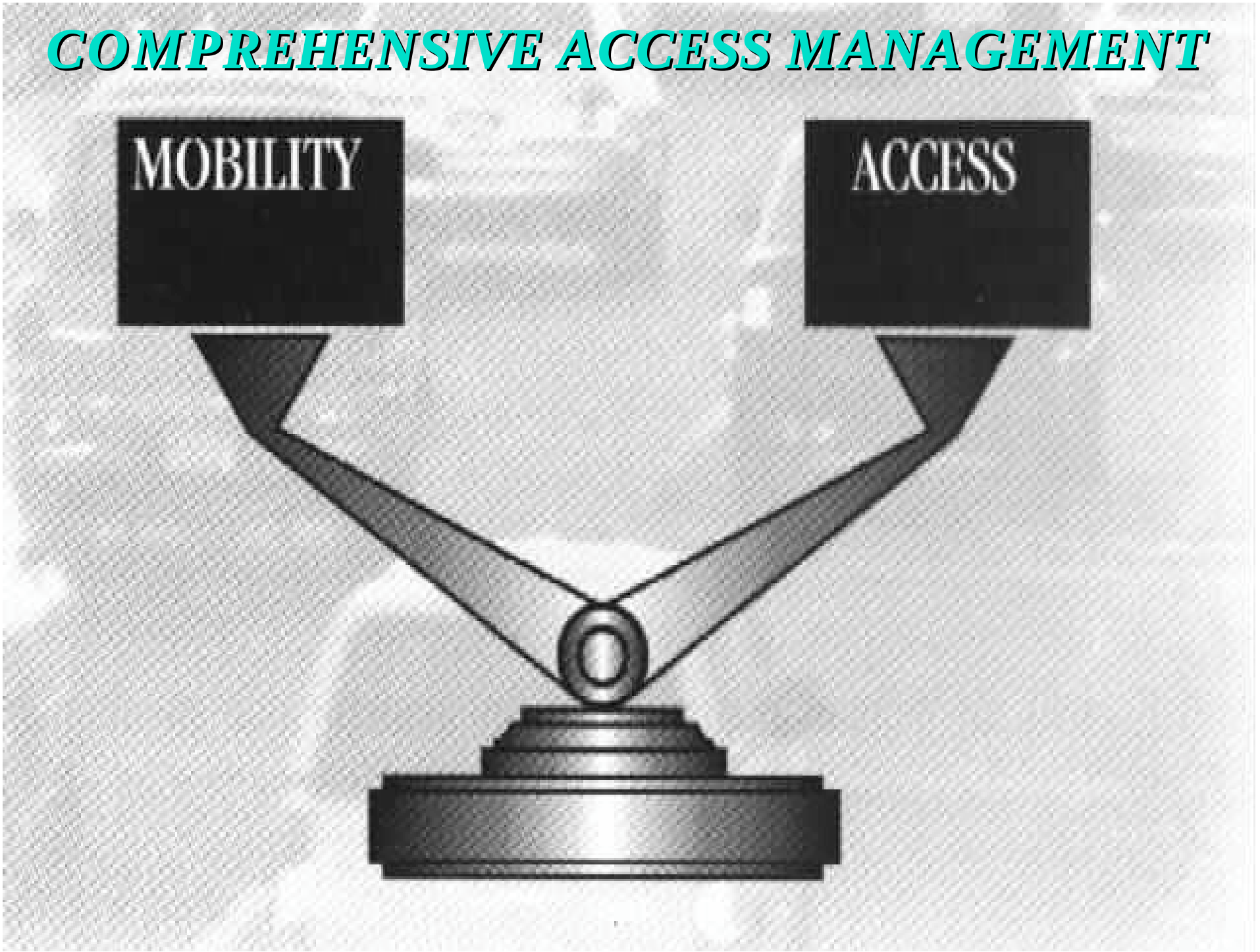
COMPREHENSIVE ACCESS MANAGEMENT

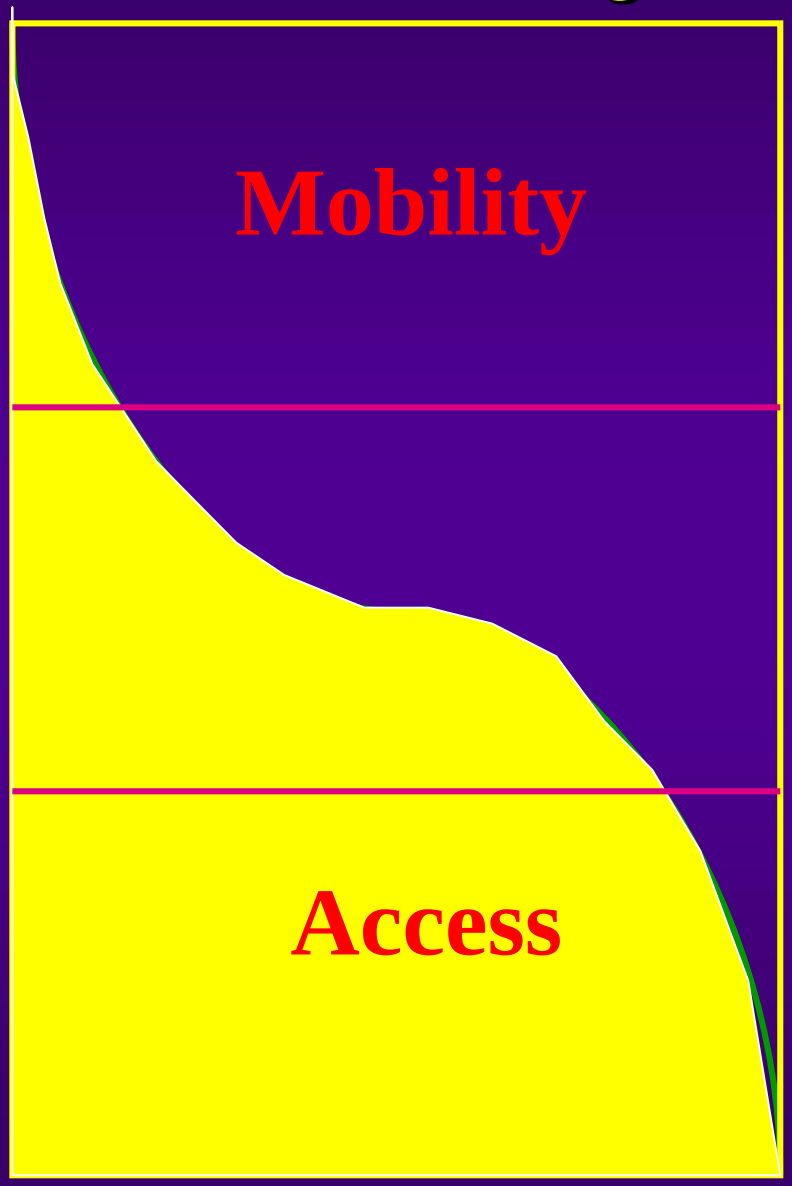


Definition

Planning, design and implementation of land use and transportation strategies that manage the flow of traffic between the road and surrounding land.

We have to balance the need to provide efficient, safe and timely travel throughout the state with the ability to allow access to the individual destination.

The Challenge



Freeway/Interstate
Expressway
Strategic Arterials

Principal Arterials
Secondary Arterials

Minor collector
Local collector

Why is Comprehensive Access Management Important?

1.
2.
3.
4.

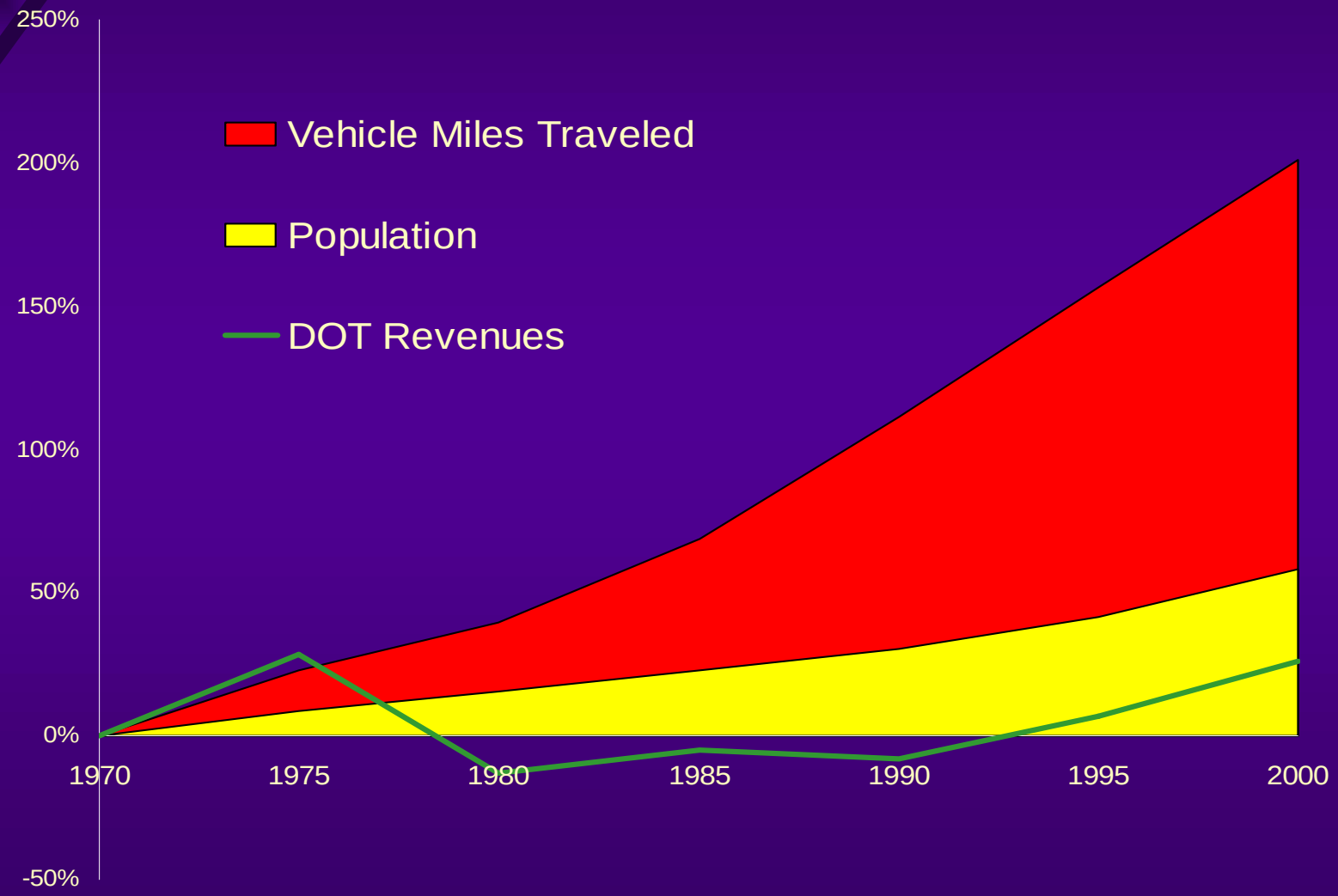
Why is Comprehensive Access Management Important?

1. Significantly enhance safety
2. Preserve and recapture mobility
3. Foster economic development
4. Increase environmental stewardship

Crash Reduction

- Accidents reduced by 30 to 60 percent

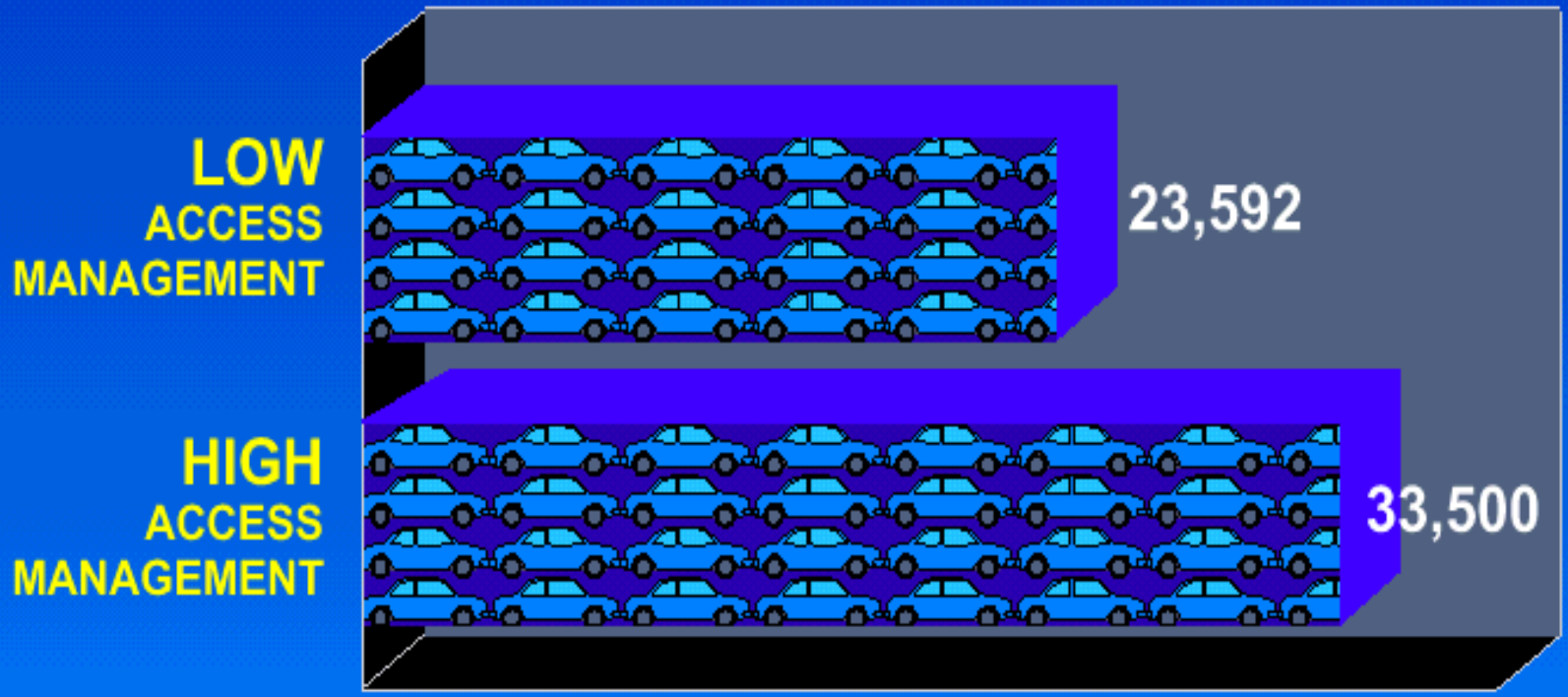
Mobility is Critical




THIS LIGHT
NEVER TURNS
GREEN

INCREASED CAPACITY

Access Management gives us room for almost 10,000 more vehicles a day*



Maximum Daily Traffic at Level of Service "D" on 4-Lane Road

* Source: FDOT and 1985 Highway Capacity Manual

Effects on the Public and Private Sector

- Travel Time
- Employment Location Decisions
- Economic Impacts on individual businesses
- Loss of Mobility Investment
- Intrastate System
- Cost for Added Capacity
- Cost to Bypass

Effects on the Environment

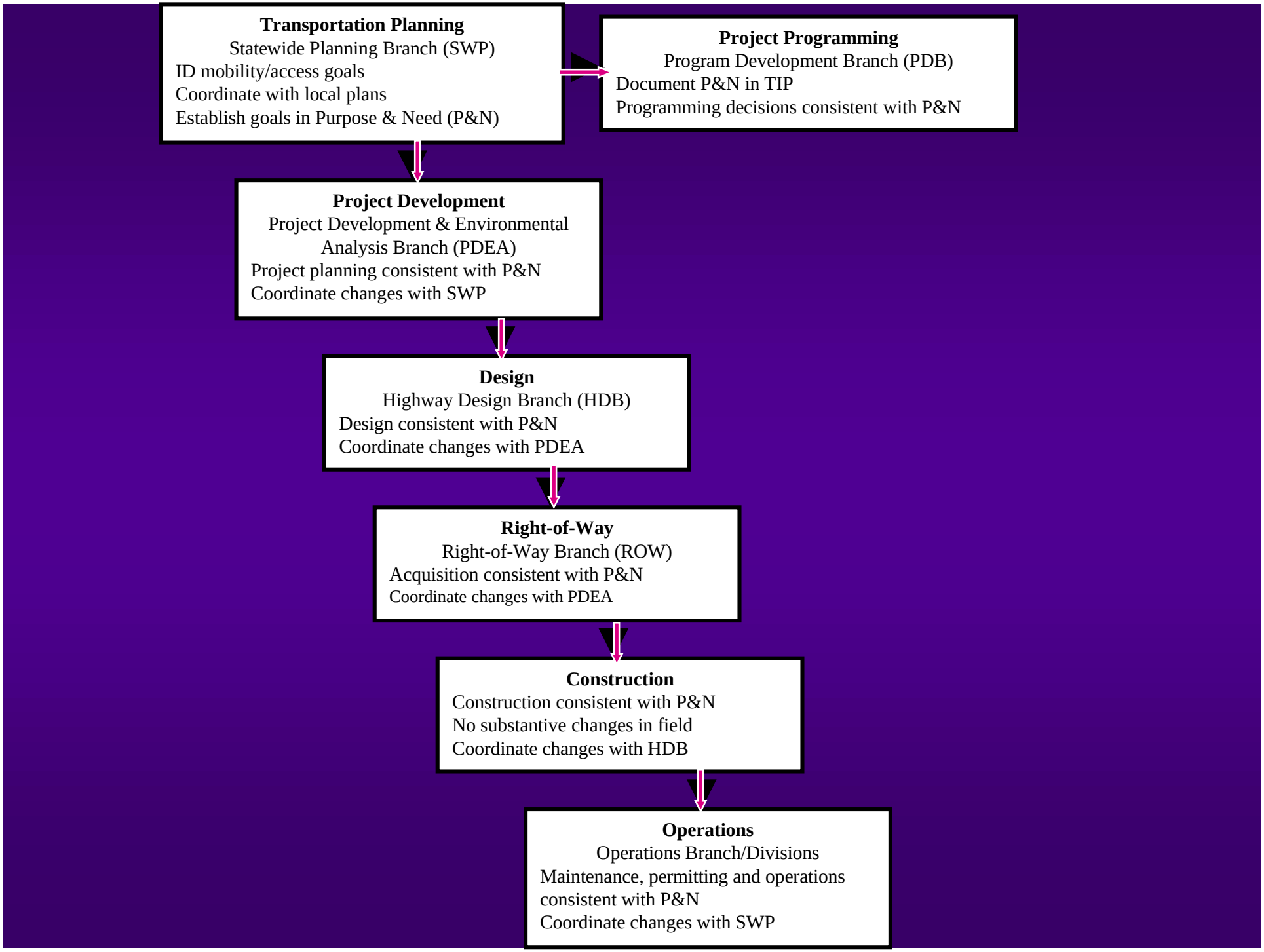
- Congestion/Air Quality
- Support of local, regional and state land use policies
- Appearance of roadside and highway areas
- Preservation of natural resources

Implementation of

Comprehensive Access Management

Main Components

- Retrofit Program
- Planning New Highways
  - Replanning Current Projects
- Education and Outreach


Transportation Planning
Statewide Planning Branch (SWP)
ID mobility/access goals
Coordinate with local plans
Establish goals in Purpose & Need (P&N)
Project Programming
Program Development Branch (PDB)
Document P&N in TIP
Programming decisions consistent with P&N
Project Development
Project Development & Environmental Analysis Branch (PDEA)
Project planning consistent with P&N
Coordinate changes with SWP
Design
Highway Design Branch (HDB)
Design consistent with P&N
Coordinate changes with PDEA
Right-of-Way
Right-of-Way Branch (ROW)
Acquisition consistent with P&N
Coordinate changes with PDEA
Construction
Construction consistent with P&N
No substantive changes in field
Coordinate changes with HDB
Operations
Operations Branch/Divisions
Maintenance, permitting and operations consistent with P&N
Coordinate changes with SWP

Key Legislative Actions

- Make HTF $ available for alternative access and retrofit programs.
- Create and fund an access management retrofit program.
- Mandate that local government /NCDOT concurrence review occurs before final local development and subdivision approvals whenever it affects a state highway.
- Implement proposed legislative changes from the Driveway Manual update.

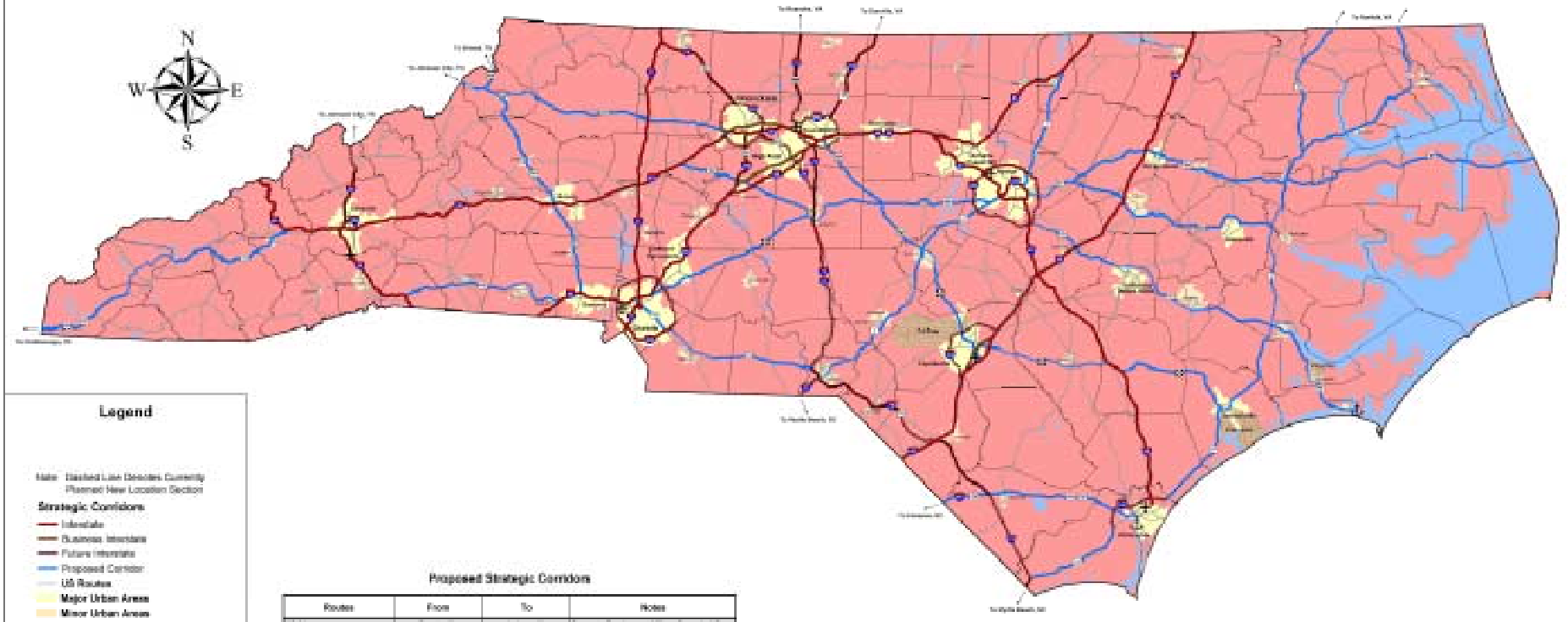
Key Policies

- Adopt the Driveway Manual update as a policy document.
- Adopt a policy which includes:
  - intersections and access points on state highways
  - medians and the location of median crossovers on state highways
  - interchanges to ensure safe and efficient operation between connecting roadways
  - requests for variance from adopted driveway and other access management standards, policies and practices
  - Respect local and regional planning decisions to the greatest extent possible
  - consult with municipalities, counties and regional organizations

Key Practices

- Project Approach
  - Include AM in corridor and transportation plans.
- Toolbox Expansion
  - Investigate & utilize alternate intersection/interchange designs & X sections.
  - Implement revised Driveway Manual on a more consistent basis.
  - Select driveway designs based on facility type and purpose (curb radii, grade)
- Coordination
  - Ensure consistency with AM policy and Driveway Manual philosophy when negotiating driveways and ROW purchases.
  - Include traffic management requirements within land use regulations. (joint and cross access, minimum lot frontage)
  - Develop collector system plans.

Proposed North Carolina Strategic Corridor System



Legend

Note: Dashed Lines Denotes Currently Planned New Location Section

Strategic Corridors

- Interstate
- Business Interstate
- Future Interstate
- Proposed Corridor
- US Routes
- Major Urban Areas
- Minor Urban Areas
- Military Bases
- Major Airports
- State Ports
- Water Features

0 5 10 20 30 40 50 Miles

Prepared By:
The North Carolina Department of Transportation
Statewide Planning Branch

Map Date: December 2, 2002

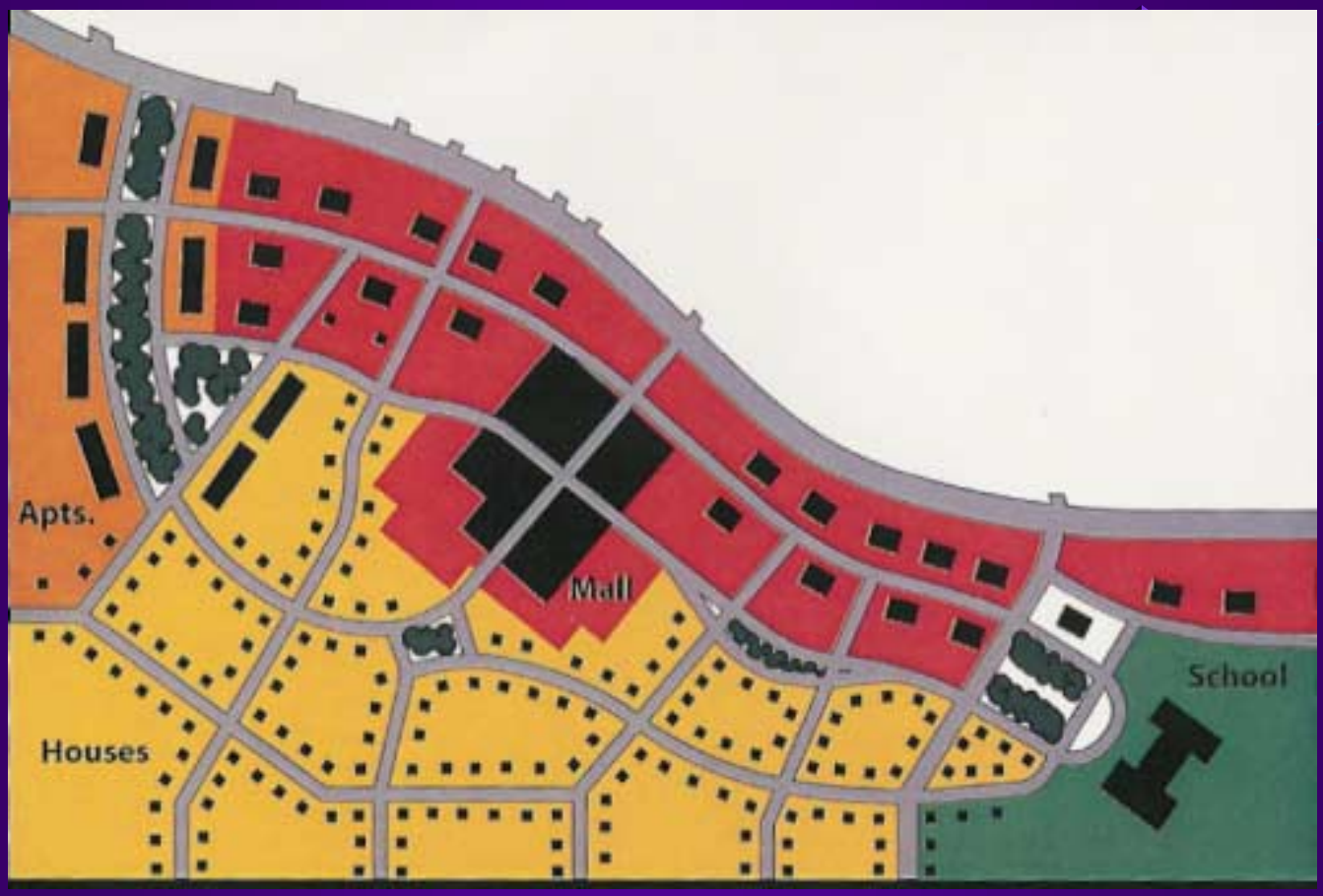
Proposed Strategic Corridors

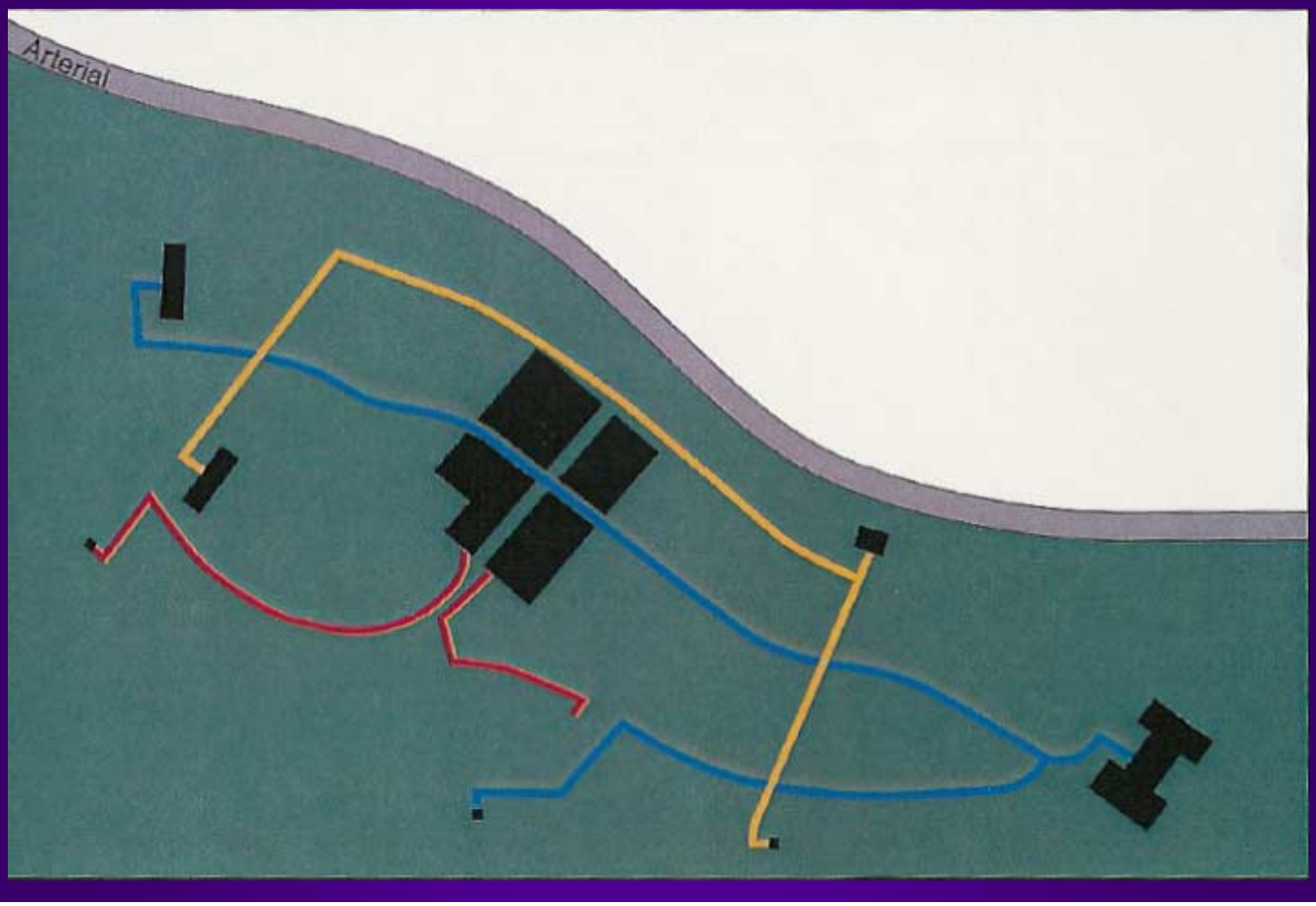
Routes	From	To	Notes
NC 24	Fayetteville	Jacksonville	Connects Two Largest Military Bases in NC
US 1	Rockingham	Henderson	Connects I-95 to I-73
US 17 (section that's US 13?)	Wilmington	Norfolk, VA	Could include US 13 North of Williamston
US 17	Myrtle Beach, SC	Wilmington	
US 64	Statesville	Raleigh	
US 64	Raleigh	Manteo	Hurricane Evacuation Route
US 64/NC 49	Charlotte	Raleigh	
US 64/US 17 (or US 13)	Raleigh	Norfolk, VA	DOI #1 High Priority Corridor 18
US 70	Raleigh	Morehead City	Hurricane Evacuation Route
US 74	Charlotte	Wilmington	Hurricane Evacuation Route
US 74	Chattanooga, TN	Asheville	Appalachian Development Corridor H
US 74	East of Hendersonville	Charlotte	
US 76 (or US Connector?)	Florence, SC	Wilmington	
US 264	Raleigh	Washington	
US 321	Gastonia	Johnson City, TN	
US 421	Boone, TN	Wilkesboro	
US 421/NC 87	Fayetteville	Greensboro	

Why Integrated Planning?

Because transportation systems and land development patterns strongly influence each other and together affect the fundamental character of our communities

The Interconnectivity of Uses


Apts.
Mall
School
Houses


Arterial

Integrating Land Use and Transportation Planning

Legislative amendments to GS136-66.2 mandate developing coordinated land use and transportation plans

NCDOT Transportation Planning

Transportation Planning Map Series

Transportation Plans include five basic mapped elements:

1. **Road System Map**
2. **Transit and Rail Map**
3. **Bicycle Map**
4. **Pedestrian Map**
5. **Cover Map**

NCDOT Transportation Planning

1. Road System Map

- Land development along state and regional highways must reflect and respect high level mobility goals
- Local and sub-regional roads provide a balance of mobility and property access

Summary

- Challenges
  - Education
  - Overcome perceptions
  - Time
- Benefits
  - Significantly enhance safety
  - Preserve and recapture mobility
  - Foster economic development
  - Increase environmental stewardship